Table 4–52. Impacts at Anticipated Borrow Areas

	Crescent Junction	Floy Wash	Courthouse Syncline	Klondike Flats	Tenmile	Blue Hills Road	LeGrand Johnson	Papoose Quarry	Blanding (use only at White Mesa Mill site)	White Mesa Mill (use only at White Mesa Mill site)
Available area	2,241 acres	374 acres	2,730 acres	2,819 acres	2,062 acres	1,760 acres	13 million yd ³	3.5 million yd ³	1,355 acres	63-83 acres
Geology and Soils	Removal of cover soils Potential for erosion Depletion of developed soil resources No road improvements required	Removal of cover soils No road improvements required	Removal of cover soils 4.5 miles of new road construction required	Removal of radon barrier material 2 miles of new road construction required	Removal of cover soils 4.5 miles of road improvements required	Removal of cover soils No road improvements required	Removal of sand and gravel Existing commercial gravel pit	Removal of limestone to be used as riprap Currently operating quarry	Removal of riprap Existing operation	Removal of soils and clay
Air Quality	Minor impacts due to dust; control measures would be implemented.	Minor impacts due to dust; control measures would be implemented.	Minor impacts due to dust; control measures would be implemented.	Minor impacts due to dust; control measures would be implemented.	Minor impacts due to dust; control measures would be implemented.	Minor impacts due to dust; control measures would be implemented.	Minor impacts due to dust; control measures would be implemented.	Minor impacts due to dust; control measures would be implemented.	Minor impacts due to dust; control measures would be implemented.	Minor impacts due to dust; control measures would be implemented.
Surface Water	No streams in the vicinity. Surface water could be ponded in pits in the borrow area for short periods after infrequent heavy rains.	Ephemeral Floy Wash, just west of the borrow area, would not be affected. Surface water could be ponded in pits in the borrow area for short periods after infrequent heavy rains.	Ephemeral Thompson and Crescent washes join in the vicinity, but no impact would occur. Surface water could be ponded in pits in the borrow area for short periods after infrequent heavy rains.	No streams in the vicinity. Surface water could be ponded in pits in the borrow area for short periods after infrequent heavy rains.	No streams occur in the vicinity. Surface water could be ponded in pits in the borrow area for short periods after infrequent heavy rains.	Ephemeral tributary to Bartlett Wash in the vicinity would not be affected. Surface water could be ponded in pits in the borrow area for short periods after infrequent heavy rains.	No change to existing impacts.	No change to existing impacts.	No streams occur at the site, situated on an alluvial terrace above the canyon of Recapture Creek to the east. Excess sedimentation and interruption of flows could influence the Recapture Creek drainage. Surface water could be ponded in pits in the borrow area for short periods after infrequent heavy rains.	An ephemeral wash draining southward through the site would not be affected. Surface water could be ponded in pits in the borrow area for short periods after infrequent heavy rains.

Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah Final Environmental Impact Statement

Table 4–52. Impacts at Anticipated Borrow Areas (continued)

	Crescent Junction	Floy Wash	Courthouse Syncline	Klondike Flats	Tenmile	Blue Hills Road	LeGrand Johnson	Papoose Quarry	Blanding (use only at White Mesa Mill site)	White Mesa Mill (use only at White Mesa Mill site)
Ground Water	No impact would occur to the deep (approximately 3,000 ft) ground water beneath the site.	No impact would occur to the deep (approximately 3,000 ft) ground water beneath the site.	No impact would occur to the deep (approximately 1,000 ft) ground water beneath the site.	No impact would occur to the deep (approximately 500 ft) ground water beneath the site.	Short-term positive impact to the shallow ground water (less than 200 ft deep) during the infrequent occurrence of ponded water from heavy rains that would recharge the aquifer.	No impact would occur to the deep (at least 600 ft) ground water beneath the site.	No change to existing impacts.	No change to existing impacts.	Short-term positive impact to the shallow perched ground water during the infrequent occurrence of ponded water from heavy rains that would recharge the aquifer.	No impact would occur to the deep (approximately 1,000 ft) ground water beneath the site.
Floodplains/ Wetlands	No known impacts.	Possible short- term impact to nearby wetland areas due to runoff.	No known impacts.	No known impacts.	Sensitive wetland system in nearby wash. Emergent and shrubby wetlands subject to degradation due to runoff.	Possible short- term impact to nearby wetland due to runoff.	No known impacts.	No known impacts.	No known impacts.	Borrow area may contain small wetlands. Probable short-term adverse impacts due to excavation.
Aquatic Ecology	No aquatic resources present.	No aquatic resources present.	No aquatic resources present.	No aquatic resources present.	No aquatic resources present.	No aquatic resources present.	No aquatic resources present.	No aquatic resources present.	No aquatic resources present.	No aquatic resources present.

4-161

Table 4–52. Impacts at Anticipated Borrow Areas (continued)

	Crescent Junction	Floy Wash	Courthouse Syncline	Klondike Flats	Tenmile	Blue Hills Road	LeGrand Johnson	Papoose Quarry	Blanding (use only at White Mesa Mill site)	White Mesa Mill (use only at White Mesa Mill site)
Terrestrial Ecology	Loss of up to 100 acres of habitat in an area of limited wildlife diversity and densities. Federally listed black-footed ferret, the white-tailed prairie dog (currently in review of federal listing), ferruginous hawk, and peregrine falcon could be present. Proximity of the Book Cliffs could increase the potential occurrence of cliff-dwelling raptors. No sensitive or critical habitat identified for wildlife species on or near the site.	Loss of up to 380 acres of habitat used by pronghorn antelope, jackrabbits, coyotes, and other mammals. Federally listed black-footed ferret and the white-tailed prairie dog (currently in review of federal listing) could occur on or near the site.	Loss of up to 155 acres of habitat in an area of sparse vegetation and low-quality wildlife habitat. Ephemeral wash on the southern perimeter may provide cover and habitat for small mammals. No critical winter or summer range identified for wildlife in this area. Federally listed black-footed ferret and the white-tailed prairie dog (currently in review of federal listing) could occur on or near the site.	Loss of up to 170 acres of habitat in an area of sparse vegetation and low-quality wildlife habitat. No critical winter or summer range identified for wildlife in this area. Federally listed black-footed ferret and the white-tailed prairie dog (currently in review of federal listing) could occur on or near the site.	Loss of up to 250 acres of habitat in an area of sparse vegetation and low-quality wildlife habitat. No critical winter or summer range identified for wildlife in this area. Federally listed black-footed ferret and the white-tailed prairie dog (currently in review of federal listing) could occur on or near the site.	Loss of up to 185 acres of habitat in an area of sparse vegetation and low quality wildlife habitat. No critical winter or summer range has been identified for wildlife in this area. Federally listed black-footed ferret and the white-tailed prairie dog (currently in review of federal listing) could occur on or near the site.	Site is surrounded by other past or present quarry and borrow sites or other developments. Existing operations render the area less attractive for many wildlife species. No federally listed species are likely to be in the vicinity.	Local area has several other past or present quarry and borrow sites or other developments. Existing operations render the area less attractive for many wildlife species. No federally listed species are likely to be in the vicinity.	Loss of 8 to 10 acres of wildlife habitat in an area where wildlife diversity and abundance is evident. Mule deer migration routes identified south of this site and within mountain ranges both east and west of US- 191; critical mule deer winter range is near the site. Federal candidate Gunnison sage grouse and burrowing owl could occur on or near the site, which is within the San Juan County Gunnison sage grouse conservation area.	Loss of up to 83 acres of habitat on IUC property. Vegetation relatively sparse, dominated by native piñon-juniper, saltbush and sagebrush communities. Federal candidate Gunnison sage grouse could occur on or near the site. No spotted owl critical habitat is present in this area.

Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah Final Environmental Impact Statement

Table 4–52. Impacts at Anticipated Borrow Areas (continued)

	Crescent Junction	Floy Wash	Courthouse Syncline	Klondike Flats	Tenmile	Blue Hills Road	LeGrand Johnson	Papoose Quarry	Blanding (use only at White Mesa Mill site)	White Mesa Mill (use only at White Mesa Mill site)
Land Use	70–100 acres of disturbance. Surface grazing rights and any subsurface oil and gas leases would be vacated until construction was completed. Area would be reclaimed and returned to BLM for prior designated uses.	178–380 acres of disturbance. Portions of the site have been used for quarry operations. Currently designated by BLM as a community pit area.	70–155 acres of disturbance. Surface grazing rights and any subsurface oil and gas leases would be vacated until construction was completed. Area would be reclaimed and returned to BLM for prior designated uses.	100–170 acres of disturbance. Surface grazing rights and any subsurface oil and gas leases would be vacated until construction was completed. Area would be reclaimed and returned to BLM for prior designated uses.	115–250 acres of disturbance. Surface grazing rights and any subsurface oil and gas leases would be vacated until construction was completed. Area would be reclaimed and returned to BLM for prior designated uses.	70–185 acres of disturbance. Surface grazing rights and any subsurface oil and gas leases would be vacated until construction was completed. Area would be reclaimed and returned for prior designated uses.	43,000– 140,000 yd³ of disturbance. Existing commercial gravel pit.	185,000– 257,000 yd ³ of disturbance. Currently operating quarry.	8–10 acres of disturbance. Surface grazing rights and any subsurface oil and gas leases would be vacated until construction was completed. Area would be reclaimed and returned to BLM for prior designated uses.	300,000–400,000 yd ³ of disturbance. Site is within IUC property boundaries on White Mesa Mill site.
Cultural Resources	On the basis of predictive modeling, 1 to 2 cultural sites could be adversely affected. Potential for traditional cultural properties is low. In consultation with affected parties, mitigation measures would be developed.	On the basis of predictive modeling, 1 to 2 cultural sites could be adversely affected. Potential for traditional cultural properties is low. In consultation with affected parties, mitigation measures would be developed.	On the basis of predictive modeling, 2 to 7 cultural sites could be adversely affected. Potential for traditional cultural properties is low. In consultation with affected parties, mitigation measures would be developed.	On the basis of predictive modeling, 3 to 7 cultural sites could be adversely affected. Potential for traditional cultural properties is low to medium. In consultation with affected parties, mitigation measures would be developed.	On the basis of predictive modeling, 4 to 11 cultural sites could be adversely affected. Potential for traditional cultural properties is low to medium. In consultation with affected parties, mitigation measures would be developed.	On the basis of predictive modeling, up to 8 cultural sites could be adversely affected. Potential for traditional cultural properties is low. In consultation with affected parties, mitigation measures would be developed.	No impact expected because materials would be removed from an existing excavation.	No impact expected because materials would be removed from an existing excavation.	On the basis of predictive modeling, 1 cultural site and at least 2 traditional cultural properties could be adversely affected. Given the density and variety of sites and importance attached to traditional cultural properties by numerous tribes, mitigation would be extremely difficult.	On the basis of previous cultural surveys conducted at this site and recent interviews with tribal members, up to 3 cultural sites and at least 3 traditional cultural properties could be adversely affected. Given the density and variety of sites and importance attached to traditional cultural properties by numerous tribes, mitigation would be extremely difficult.

Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah Final Environmental Impact Statement

4-163

Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah Final Environmental Impact Statement

Table 4–52. Impacts at Anticipated Borrow Areas (continued)

	Crescent Junction	Floy Wash	Courthouse Syncline	Klondike Flats	Tenmile	Blue Hills Road	LeGrand Johnson	Papoose Quarry	Blanding (use only at White Mesa Mill site)	White Mesa Mill (use only at White Mesa Mill site)
Noise and Vibration	Maximum noise assumed to be 95 dBA as a result of heavy equipment operations. An area with a radius of approximately 1,480 ft around the borrow area would exceed 65 dBA. Ground vibrations attenuate to background levels within 825 ft.	Maximum noise assumed to be 95 dBA as a result of heavy equipment operations. An area with a radius of approximately 1,480 ft around the borrow area would exceed 65 dBA. Ground vibrations attenuate to background levels within 825 ft.	Maximum noise assumed to be 95 dBA as a result of heavy equipment operations. An area with a radius of approximately 1,480 ft around the borrow area would exceed 65 dBA. Ground vibrations attenuate to background levels within 825 ft.	Maximum noise assumed to be 95 dBA as a result of heavy equipment operations. An area with a radius of approximately 1,480 ft around the borrow area would exceed 65 dBA. Ground vibrations attenuate to background levels within 825 ft.	Maximum noise assumed to be 95 dBA as a result of heavy equipment operations. An area with a radius of approximately 1,480 ft around the borrow area would exceed 65 dBA. Ground vibrations attenuate to background levels within 825 ft.	Maximum noise assumed to be 95 dBA as a result of heavy equipment operations. An area with a radius of approximately 1,480 ft around the borrow area would exceed 65 dBA. Ground vibrations attenuate to background levels within 825 ft.	Maximum noise assumed to be 95 dBA as a result of heavy equipment operations. An area with a radius of approximately 1,480 ft around the borrow area would exceed 65 dBA. Ground vibrations attenuate to background levels within 825 ft.	Maximum noise assumed to be 95 dBA as a result of heavy equipment operations. An area with a radius of approximately 1,480 ft around the borrow area would exceed 65 dBA. Ground vibrations attenuate to background levels within 825 ft.	Maximum noise assumed to be 95 dBA as a result of heavy equipment operations. An area with a radius of approximately 1,480 ft around the borrow area would exceed 65 dBA. Ground vibrations attenuate to background levels within 825 ft.	Maximum noise assumed to be 95 dBA as a result of heavy equipment operations. An area with a radius of approximately 1,480 ft around the borrow area would exceed 65 dBA. Ground vibrations attenuate to background levels within 825 ft.
Visual Resources	Might be visible from I-70. Compatible with Class III objectives.	Might be visible from I-70. Compatible with Class III objectives.	Not visible to general public. Compatible with Class III objectives.	Not visible to general public. Compatible with Class III objectives.	Would be visible to recreational users on adjacent road. Compatible with Class IV objectives.	Would be visible to recreational users on Blue Hills Rd. Not compatible with Class III objective during short term. Compatible with Class III objectives during long term.	No change to existing impacts.	No change to existing impacts.	Could be visible to travelers on US-191. Compatible with Class III objectives.	Would not be visible to the public. Compatible with Class III objectives.

Table 4–52. Impacts at Anticipated Borrow Areas (continued)

	Crescent Junction	Floy Wash	Courthouse Syncline	Klondike Flats	Tenmile	Blue Hills Road	LeGrand Johnson	Papoose Quarry	Blanding (use only at White Mesa Mill site)	White Mesa Mill (use only at White Mesa Mill site)
	No impact to local or regional power supplies.	No impact to local or regional power supplies.	No impact to local or regional power supplies.	No impact to local or regional power supplies.	No impact to local or regional power supplies.	No impact to local or regional power supplies.	No impact to local or regional power supplies.	No impact to local or regional power supplies.	No impact to local or regional power supplies.	No impact to local or regional power
Infrastructure	Water requirements included in off- site disposal area impacts.	Water requirements included in off- site disposal area impacts.	Water requirements included in off-site disposal area impacts.	Water requirements included in off- site disposal area impacts.	supplies. Water requirements included in off-site disposal area impacts.					
	Increased wear and tear on roads.	Increased wear and tear on roads.	Increased wear and tear on roads.	Increased wear and tear on roads.	Increased wear and tear on roads.	Increased wear and tear on roads.	Increased wear and tear on roads.	Increased wear and tear on roads.	Increased wear and tear on roads.	Increased wear and tear on roads. No rail transportation
	No rail transportation required.	No rail transportation required.	No rail transportation required.	No rail transportation required.	No rail transportation required.	No rail transportation required.	No rail transportation required.	No rail transportation required.	No rail transportation required.	required.
Waste	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.
Socio- economics	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.
Human Health	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.
Traffic	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.
Accidents	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.
Environmental Justice	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.	Included in disposal site impacts.

Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah Final Environmental Impact Statement